

ABSTRACT

Applicant presents replacement Abstract below indicating the changes with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

-- The invention relates to a TFA image sensor with stability-optimized photodiode for converting electromagnetic radiation into an intensity-dependent photocurrent with an intermetal dielectric, on which, in the region of the pixel matrix, a lower barrier layer (~~metal-2~~) is situated and a conductive layer (~~metal-2~~) is situated on ~~said~~ the barrier layer, and vias being provided for the contact connection to the ASIC, ~~said~~ the vias in metal contacts on the ASIC. ~~[[¶]] The invention is based on the object of providing a~~ A TFA image sensor having improved electrical properties is provided. This is achieved in that an intrinsic absorption layer (~~+~~) is provided between the TCO layer and the barrier layer (~~metal-2~~) with a layer thickness of between 300 nm and 600 nm. Before the application of the photodiodes, the topmost, comparatively thick metal layer of the ASIC is removed and replaced by a matrix of thin metal electrodes which form the back electrodes of the photodiodes, ~~said~~ the matrix being patterned in the pixel raster. ~~(Figure 11)--~~